

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference PC-21005950	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/B2003/005269	International filing date (day/month/year) 20.11.2003	Priority date (day/month/year) 20.11.2003
International Patent Classification (IPC) or both national classification and IPC H04M1/02		
Applicant NOKIA CORPORATION		

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 5 sheets, including this cover sheet.  
  
☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).  
  
 These annexes consist of a total of 5 sheets.

- This report contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand  10.06.2005	Date of completion of this report  08.02.2006
Name and mailing address of the international preliminary examining authority:   European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer  Pascual Vallés, E  Telephone No. +31 70 340-1022  

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. **PCT/IB2003/005269**

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-17 as originally filed

**Claims, Numbers**

1-17 as amended (together with any statement) under Art. 19 PCT

**Drawings, Sheets**

1/6-6/6 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:  
☐ the claims, Nos.:  
☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes: Claims	8,9,16
	No: Claims	1-7,10-15,17
Inventive step (IS)	Yes: Claims	
	No: Claims	1-17
Industrial applicability (IA)	Yes: Claims	1-17
	No: Claims	

**2. Citations and explanations**

**see separate sheet**

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International application No. PCT/IB2003/005269

The following documents (D1 and D2) were not cited in the international search report. Copies of the documents are appended hereto.

**D1:** GB-A-2 387 063 (NEC CORP) 1 October 2003 (2003-10-01)

**D2:** US 2001/004269 A1 (NEC CORP) 21 June 2001 (2001-06-21)

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of independent claim 1 is not new in the sense of Article 33(2) PCT.

The document D1 discloses (the references in parentheses applying to this document):

A communication apparatus (fig.1A-1E, ref.500) comprising a first housing member (fig.1A-1E, ref.200) and a second housing member (fig.1A-1E, ref.100), which are mechanically interconnected (fig.1A-1E, ref.300) so that said first housing member is foldable (fig.1A and 1B) as well as turnable (fig.1C-1E) with respect to said second housing member so as to assume different operating positions (page 5, lines 16-25), said communication apparatus having a user interface including a display (fig.1B-1E, ref.202) and a manual input means (fig.1B-1E, ref.207, page 6, lines 2-5, page 12, lines 3-15), and a processing device (fig.4, ref.109, page 11, line 19-page 14, line 10) for providing services to a user through said user interface, wherein said display is located in said first housing member, said manual input means comprises a first set of keys (fig.1B-1E, ref.207, page 12, lines 3-15) comprised in said first housing member, and a second set of keys (fig.1B-1E, page 6, lines 2-5) comprised in said second housing member, wherein a plurality of said services are controllable by said user through said first set of keys, said operating positions including a compact position (fig.1E) in which said first housing member is folded against said second housing member, wherein said first set of keys and said display are accessible to, and said plurality of said services are controllable by, said user in said compact position, and said operating positions including an open position (fig.1B) in which said first

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housing member is unfolded from said second housing member, wherein said first set of keys and said display as well as said second set of keys are accessible to, and said plurality of said services are controllable by, said user in said open position.

The subject-matter of claim 1 is therefore not new (Article 33(2)PCT). Furthermore, document D2 is also considered to be prejudicial against the novelty of this claim, as it discloses all its features (see D2, fig.1-13, paragraphs [201]-[234]).

- 1.1. The same reasoning applies, mutatis mutandis, to the subject-matter of the independent claim 12 which therefore is also considered not new/inventive.
2. Dependent claims 2-11 and 13-17 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step, see documents D1 and D2.
3. The subject-matter of claims 1-17 relates to a communication apparatus comprising two housing members mechanically interconnected and being foldable and turnable with respect to each other and has an industrial application.

## AMENDED CLAIMS UNDER ART 19 PCT

1. A communication apparatus (1) comprising a first housing member (100) and a second housing member (200), which are mechanically interconnected so that said first housing member is foldable as well as turnable with respect to said second housing member so as to assume different operating positions, said communication apparatus having a user interface (334) including a display (110) and manual input means (120, 220), and a processing device (300) for providing services (340-346) to a user through said user interface, wherein said display is located in said first housing member,
- characterized in that**
- said manual input means comprises a first set of keys (120) comprised in said first housing member (100), and a second set of keys (220) comprised in said second housing member (200), wherein a plurality of said services (340-346) are controllable by said user through said first set of keys,
- said operating positions including a compact position in which said first housing member (100) is folded against said second housing member (200), wherein said first set of keys (120) and said display (110) are accessible to, and said plurality of said services (340-346) are controllable by, said user in said compact position, and
- said operating positions including an open position in which said first housing member (100) is unfolded from said second housing member (200), wherein said first set of keys (120) and said display (110) as well as said second set of keys (220) are accessible to, and said plurality of said services (340-346) are controllable by, said user in said open position.

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2. A communication apparatus according to claim 1, wherein said first set of keys (120) and said display (110) are arranged in essentially the same plane.

5 3. A communication apparatus according to claim 2, wherein said same plane coincides with or is parallel to a front side (100a) of said first housing member (100).

10 4. A communication apparatus according to any preceding claim, wherein a telephone application for performing speech communication in the form of telephone calls is included in said plurality of said services (340-346).

15 5. A communication apparatus according to any preceding claim, wherein said plurality of said services (340-346) comprises at least two services selected from the following group:

20 a telephone application for performing speech communication in the form of telephone calls,  
... an Internet browser application (340),  
a WWW browser application,  
a WAP browser application,  
a phonebook application (342),  
25 a contacts application,  
a camera application (344),  
an image recordal application,  
a video recordal application,  
a messaging application (346),  
30 an email application,  
an SMS application,  
an MMS application,  
a calendar application,  
an organizer application,  
35 a video game application,  
a calculator application,  
a voice memo application,

an alarm clock application,  
a word processing application,  
a code memory application,  
a music player application,  
5 a media streaming application, and  
a control panel application.

6. A communication apparatus according to any  
10 preceding claim, further comprising a camera (205), said  
operating positions including a camcorder position in  
which said first housing member (100) is unfolded as well  
as turned with respect to said second housing member  
(200), wherein said first set of keys (120) and said  
15 display (110) are accessible to, and a camera application  
(344) among said services (340-346) is controllable by,  
said user in said camcorder position.

7. A communication apparatus according to claim 6,  
20 said operating positions including a self-portrait  
position in which said first housing member (100) is  
unfolded with respect to said second housing member (200)  
and turned by substantially 180° with respect to said  
camcorder position, wherein said first set of keys (120)  
25 and said display (110) are accessible to, and a camera  
application (344) among said services (340-346) is  
controllable by, said user in said self-portrait  
position.

8. A communication apparatus according to any  
30 preceding claim, wherein said first set of keys (120)  
comprises at least one context-sensitive key (122, 123),  
the function of which depends on an active one of said  
plurality of said services (340-346) that currently is  
35 controlled through said user interface (334).

9. A communication apparatus according to any preceding claim, wherein said first set of keys (120) comprises at least one navigation key (121) for multi-directional navigating and selecting actions in said user interface (334).

10. A communication apparatus according to any preceding claim, wherein said second set of keys (220) includes a group of keys that constitutes a telephone-type (PIN, IT-U) keypad and includes digit keys 0 through 9.

11. A communication apparatus according to any preceding claim, in the form of a mobile terminal for a mobile telecommunication system such as GSM, D-AMPS, CDMA2000 or UMTS.

12. A communication apparatus (1) comprising a first housing member (100), a second housing member (200) and a hinge assembly (10, 11) having a first hinge functionality connecting the first and second housing members pivotally to each other, and a second hinge functionality allowing one of said first and second housing members to turn relatively to the other housing member, characterized in that

said first housing member (100) comprises a display (110) and a set of keys (120) for operating the communication apparatus (1), and in that

said hinge assembly (10, 11) allows said first and second housing members (100, 200) to assume first and second closed positions in which said first and second housing members are folded against each other, as well as an open position in which said first and second housing members are unfolded from each other,

wherein, in said first closed position, said display and said set of keys (120) of said first housing member face towards said second housing member, and

wherein, in said second closed position as well as in said open position, said display and said set of keys (120) of said first housing member are exposed and allow a user to operate said communication apparatus.

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13. A communication apparatus according to claim 12, wherein a plurality of services (340-346) provided by said communication apparatus are controllable through said set of keys (120) in said second closed position.

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14. A communication apparatus according to claim 13, wherein said plurality of services (340-346) includes speech communication in the form of telephone calls.

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15. A communication apparatus according to any one of claims 13 or 14, wherein said set of keys (120) comprises at least one context-sensitive key (122, 123), the function of which depends on an active one of said plurality of services (340-346).

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16. A communication apparatus according to any one of claims 13-15, wherein said set of keys (120) comprises at least one navigation key (121) for multi-directional navigating and selecting actions in an active one of said plurality of services (340-346).

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17. A communication apparatus according to any one of claims 12-16, in the form of a mobile terminal for a mobile telecommunication system such as GSM, D-AMPS, CDMA2000 or UMTS.

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